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中国扁叶蝉亚科一新属三新种 (同翅目, 叶蝉科, 扁叶蝉亚科)

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摘 要 报道扁叶蝉亚科 1 新属, 网背叶蝉属 *Reticuluma* gen. nov. 及 3 新种, 柑橘网背叶蝉 *R. citrana* sp. nov. (模式种)、林氏网背叶蝉 *R. lini* sp. nov. 和刺茎网背叶蝉 *R. spinata* sp. nov.。模式标本存放于贵州大学昆虫研究所。

关键词 同翅目, 叶蝉科, 扁叶蝉亚科, 新属, 新种.
中图分类号 Q969.362.8

网背叶蝉属, 新属 Reticuluma **gen. nov.**

模式种: 柑橘网背叶蝉, 新种 *Reticuluma citrana* sp. nov.

头冠、前胸背板、小盾片和前翅均具黑色网状纹。头部前缘向前倾斜, 头冠与颜面分界明显, 中央长度约为2 复眼间宽的 1/2, 冠缝明显; 单眼位于头冠前域, 其间的距离大于与前缘之距; 颜面宽大于长, 轻度凹扁。前胸背板比头部约宽, 微拱凸前倾; 前翅在腹部背面成屋脊状, 翅脉清晰, 端室 4 或 5 个, 端片较窄。雄虫尾节侧瓣腹缘有或无突起; 下生殖板近似三角形; 阳茎常有突起或缺; 阳基侧突端向逐渐缢缩, 端部一般成弯钩状; 连索近似丫形或 T 形。

本属外部形态特征与 *Tambila* Distant 属相似, 不同点在于新属头部前端宽圆突出, 头冠、前胸背板、小盾片和前翅均具黑色网状纹; 与扁叶蝉属 *Penthimia* Distant 的主要区别在于新属头冠与颜面分界明显, 前翅在腹部背面成屋脊状, 端片狭窄; 新属与折缘叶蝉属 *Neodartus* Melichar 的区别在于新属头冠前缘向前倾斜, 中央长度约为二复眼间宽的 1/2。

词源: 新属以头冠、前胸背板、小盾片和前翅均具网状纹命名, 以拉丁字 *Reticulum* (小网、网状组织) 构成新属名。

1 柑橘网背叶蝉, 新种 Reticulum citrana **sp. nov.** (图 1~ 7)

体连翅长: 雄虫 4.0~ 4.2 mm, 雌虫 4.3~ 4.8 mm。

本种外形特征概如属征描述。头冠长约为二复眼间宽的 1/2, 前缘弧缘突出, 冠缝伸达头冠中长的 3/5; 单眼位于复眼前方, 到复眼的距离小于与冠缝之距离; 颜面凹扁, 前唇基扁平, 额唇基隆起。前胸背板比头部宽, 中央长度约等于头冠中长的 1.5 倍, 前缘弧圆突出, 后缘较平直, 中部稍隆起; 小盾片宽大于长, 横刻痕弧形深刻。前翅长超过腹部末端, 成屋脊状, 爪区末端平直, 端片小, 端室 5 个。足腿节扁平, 后足胫节外侧有 2 列长刺, 内侧有 1 列短刺。

雄虫尾节侧瓣端缘弧圆, 端腹缘有 1 弯突; 下生殖板呈镰刀形, 近外缘有不规则排列的粗刚毛, 端部有稀疏细毛; 阳茎粗似手榴弹状, 腔腹体粗大, 约占阳茎干总长 1/3, 亚端部外侧有 1 近似三角形突起, 端部尖; 连索 T 形; 阳基侧突端向逐渐缩小, 中部缢缩, 端部尖, 向外侧弯曲。雌虫腹部第 7 节腹板后缘弧形凹入, 中间微突, 两侧端部成尖角状。

雄虫头冠、前胸背板、小盾片和前翅网状纹黑色。头冠黄白色, 有 4 个红色圆斑, 排成弧形, 基部有 2 个不甚明显的橘黄色小斑, 单眼黑色, 周围有 1 圈红晕, 复眼黑色, 有灰白色斑。前胸背板黄白色, 中央有 1 馒头状黑色隐斑, 仅近后缘色较浓, 占去前胸背板约 1/2; 小盾片黄白色, 横刻痕处黑色; 前翅灰褐色半透明, 具 2 个不规则黑色斑纹, 翅脉黑色, 端室中央黑色。胸部腹板和胸足黑色, 胫刺黄白色。腹部腹面黑色, 背面桔黄色。雌虫前翅无黑斑, 其它斑纹特征与雄虫基本一致。

正模 ♂, 贵州罗甸, 1985-06-15, 陈兵采; 副模 2 ♂♂, 1♀, 贵州道真, 1988-04-16, 李子忠采;

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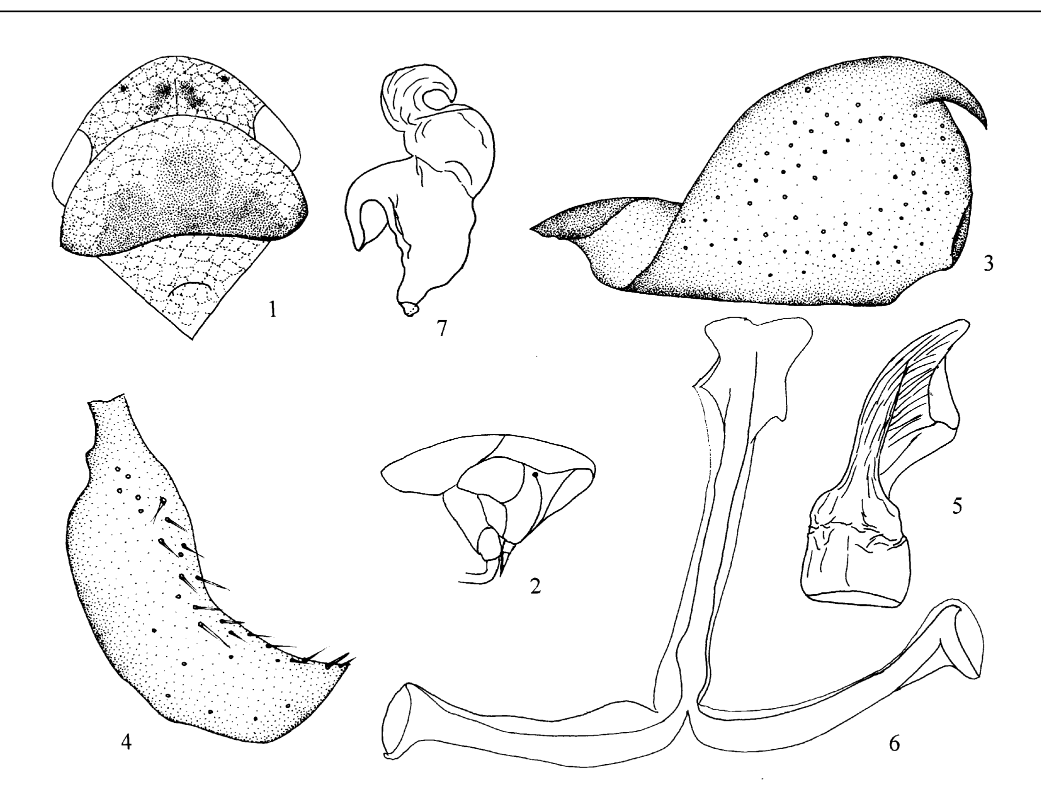


图 1~ 7 柑橘网背叶蝉, 新种 *Reticuluma citrana* sp. nov.
1. 头、胸部背面 (head and thorax, dorsal view) 2. 头、胸部侧面 (head and thorax, lateral view) 3. 雄虫尾节侧瓣 (♂pygofer side) 4. 下生殖板 (subgenital plate) 5. 阳茎侧面观 (aedeagus, lateral view) 6. 连索 (connective) 7. 阳基侧突 (style)

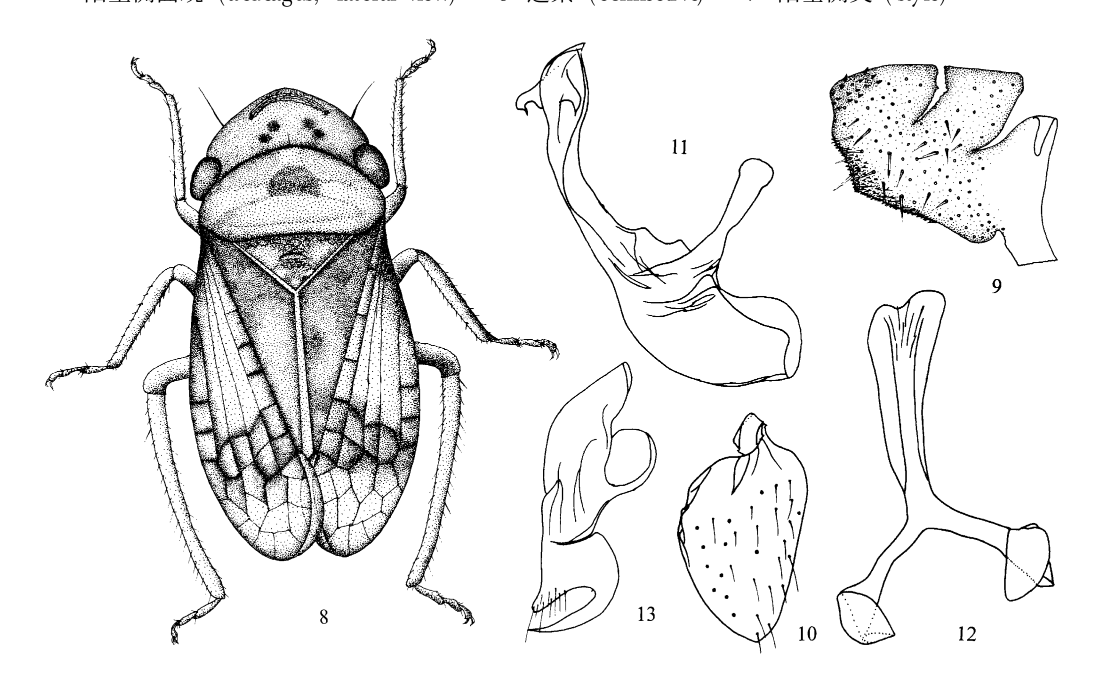


图 8~ 13 林氏网背叶蝉, 新种 *Reticuluma lini* sp. nov.
8. 成虫 (adult, dorsal view) 9. 雄虫尾节侧瓣 (♂pygofer side) 10. 下生殖板 (subgenital plate) 11. 阳茎侧面观 (aedeagus, lateral view) 12. 连索 (connective) 13. 阳基侧突 (style)

副模 2♀♀, 贵州平塘, 1981-06-17, 李子忠采。

寄主: 柑橘类。

词源: 新种以模式种寄主命名。

2 林氏网背叶蝉, 新种 Reticuluma lini **sp. nov.** (图 8~ 13)

体连翅长: 雄虫 3.8~ 4.0 mm, 雌虫 4.1~ 4.2

mm。

本种外形特征概如前种。惟头冠前缘钝圆，加厚不明显，其上有细微横皱，冠缝较短，不及头冠中长之半；颜面极度凹扁，额唇基隆起扁平，后唇基隆起。前胸背板比头部略宽，前缘弧形凸出，后缘几乎平直。雄虫尾节侧瓣端圆弧圆突出，具细短刚毛；下生殖板宽短，近似心脏形，具稀疏细毛；阳茎腔腹体大，端干细长，端部细，近基部 1/3 处有 1 长突，亚端部有 1 对小钩；连索宽丫形，主干长大于臂长，端部略加宽；阳基侧突基部较宽，中部缢缩，端部骤变细向外侧弯曲，末端尖细。雌虫腹部第 7 腹板中央长度是第 6 节的两倍，中央平凹入，产卵器伸出尾节外。

雄虫头冠、前胸背板、小盾片和前翅网状纹黑色。头冠乳白色，中央有 4 个红色小点成弧形排列，单眼红色，复眼黑色，复眼上有小白斑。前胸背板淡黄白色，中央有 1 波状黑斑；中胸小盾片淡黄白色；前翅淡黄白色，半透明，翅脉红色，基部沿爪区外缘有 1 长黑斑，中部及近端部前缘各有 1 黑斑，翅面上具不规则斑点；胸部腹板黑色，前中、足腿节淡黄白色，胫节及后足黑色。腹部腹面黑色，背面色淡橘黄色。雌虫前翅上 3 块黑斑几乎连成 1 片，其它部分特征与雄虫基本一致。

正模 ♂，福州金山，1996-11-12，林乃铨采；副模 3 ♂♂，1♀，福州金山，1997-04-20，林乃铨采。

此种外部形态特征与柑橘网背叶蝉 *Reticuluma citrana* sp. nov. 相似，区别点在于新种阳茎近基部 1/3 处有 1 长突，亚端部有 1 对小突钩，连索宽丫形。

词源：新种以采集人林乃铨教授姓氏拉丁文缩写 *Lini* 命名。

3　刺茎网背叶蝉，新种 Reticuluma spinata **sp. nov.**（图 14～19）

体连翅长：雄虫 3.9～4.1 mm，雌虫 4.1～4.3 mm。

本种外形及各部特征概如柑橘网背叶蝉。惟单眼到复眼的距离约等于到冠缝之距。前胸背板长度约为头冠长的 1.5 倍。雄虫尾节侧瓣端缘宽圆突出多细毛；下生殖板宽短，近似心脏形，被稀疏细毛；阳茎腔腹体粗大，至端部渐细，亚端部稍缢缩，末端逆生 2 根刺突；连索近似 T 形；阳基侧突基部宽，亚端部极度变细向外弯曲，弯折处有细刚毛。雌虫第 7 节腹板后缘弧形深凹，中部略突出。

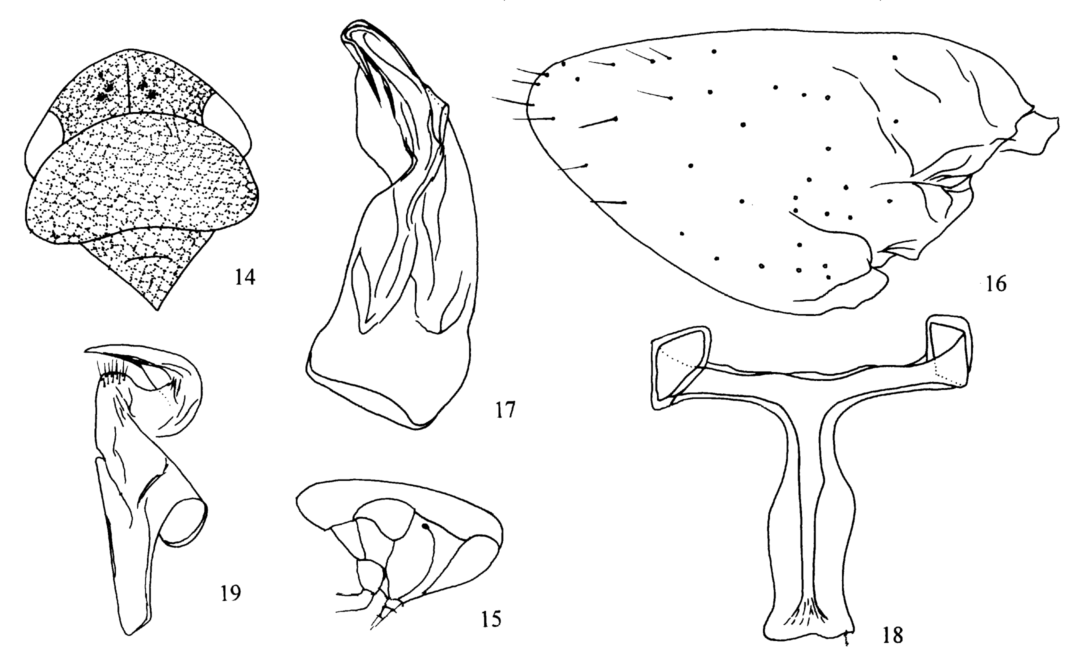


图 14～19　刺茎网背叶蝉，新种 *Reticuluma spinata* sp. nov.
14. 头、胸部背面（head and thorax, dorsal view）15. 头部侧面（head lateral view）16. 下生殖板（subgenital plate）17. 阳茎侧面观（aedeagus, lateral view）18. 连索（connective）19. 阳基侧突（style）

雄虫头冠、前胸背板、小盾片和前翅网状纹黑色。头冠黄褐色，单眼红色，复眼黑色，有灰白斑。前胸背板黄褐色，近后缘 1/3 部分黑色；小盾片黄褐色，横刻痕黑色；前翅淡黄褐色，半透明，翅脉及翅室中央黑色；胸部腹板和足黑色，胫刺黄色。腹部腹面黑色，背面为橘黄色，下生殖板端部黄色。

雌虫前胸背板上黑色部向前延伸成馒头状，其余部分特征与雄虫基本一致。

正模 ♂，贵州荔波，副模 2 ♂♂，2♀♀，贵州荔波，1988-10-15，李子忠采。

本种与柑橘网背叶蝉 *Reticuluma citrana* sp. nov. 相似，主要区别在于新种雄虫尾节侧瓣无突起，阳茎端部逆生 2 根刺突，下生殖板心脏形。

词源：新种以阳茎端部逆生 2 根刺突命名，以拉丁字 *spinata*（刺）构成新种名。

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A NEW GENUS AND THREE NEW SPECIES OF PENTHIMIINAE (HOMOPTERA, CICADELLIDAE) FROM CHINA

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Abstract A new genus and three new species of Penthimiinae are described from China in the present paper. All type specimens are deposited in the Institute of Entomology, Guizhou University, China.

Reticuluma **gen. nov.**

Body somewhat depressed. Head obtuse, anteriorly rounded, vertex of head somewhat sloped, between crown and face with obvious boundary, its length about half as long as breadth between eyes; ocelli placed on the disc of the vertex a little middle, more remote from each other than from lateral margins; face somewhat concave, frons a little convex; pronotum longer than vertex, slightly convex, its anterior margin moderately convex, posterior margin slightly concave; scutellum triangula broader than long; forewings ridgelike, a little widened at middle, apical areas four or five, appendage narrow. Vertex, pronotum, scutellum and forewings with veins of network black. Lateral margin of pygofer side near apex with or without process; subgenital plate similar to triangule; aedeagus with or without process; connective Y-shaped or T-shaped; style narrowing from basal two thirds to apex, acute at apex.

This new genus resembles *Tambila* Distant, but can be distinguished by vertex broad, anteriorly rounded, vertex, pronotum, scutellum and forewings with veins of network black. It is similar to *Penthimia*, but differs from the latter in the presence of a obvious boundary between vertex and face, forewings ridgelike and appendage narrow. The new genus is also similar to *Neodartus*, but verte somewhat sloped, its length about one half of the breadth between eyes.

Etymology. The generic name is derived from the Latin *Reticuluma* (reticulum), in reference to the dorsum of body with reticulation.

1 Reticuluma citrana **sp. nov.** (Figs. 1-7)

Length (incl. teg.): ♂4.0-4.2 mm, ♀4.3-4.8 mm.

Pygofer side of male with a process, subgenital plate sickle-shaped, aedeagus grenade-shaped, connective T-shaped. Vertex, pronotum and scutellum pale yellow with netted stripes black, vertex with four small red spots, basal area of pronotum with a big black spot, forewings of male grey with two irregular black spots and netted stripes black.

Holotype ♂, Luodian (25°43′ N, 106°74′ E), Guizhou Province, 15 June 1985, coll. CHEN-Bian. Paratypes: 2 ♂♂, 1♀, Daozhen, Guizhou Province, 16 June 1988, coll. LI Zi-Zhong; paratypes 2♀♀, Pingtang, Guizhou Province, 17 June 1981, coll. LI Zi-Zhong.

Etymology. The specific name is derived from the Latin *citanai* (citr-), in reference to the type host.

2 Reticuluma lini **sp. nov.** (Figs. 8-13)

Length (incl. teg.): ♂3.8-4.0 mm, ♀4.1-4.2 mm.

Pygofer side of male without process, subgenital plate heart-shaped, end near aedeagus with a pair of hook processes, connective Y-shaped. Vertex milky white with four orang spots on disc, pronotum yellow with a large spot, ventral area of body black, dorsal area of abdomen orange.

This new species is similar to *Reticuluma cirtana* sp. nov., but differs from the latter in the following aspects: on 1/3 of aedeagus near base with a long protuberance and a pair of hooks near apex; connective Y-shaped.

Holotype ♂, Fuzhou, Jinshan (26° 08′ N, 119°30′ E), Fujian Province, 12 Nov. 1996, coll.

LIN Nai-Quan. Paratypes 3 ♂♂, 1♀, Fuzhou, Jin-shan, Fujian Province, 20 Apr. 1997, coll. LIN Nai-Quan.

Etymology. The specific name is derived from the collecter (Prof. LI Nai-Quan) in order to remember his support for the study.

3 Reticuluma spinata **sp. nov.** (Figs. 14-19)

Length (incl. teg.): ♂3.9-4.1 mm, ♀4.1-4.3 mm.

Pygofer side of male without process, subgenital plate heart-shaped, end of aedeagus with two adverse spinae-shaped processes, connective T-shaped. Vertex, pronotum and scutellum yellow-fuscus, base of pronotum with a laege black spot.

This new species is close to *Reticuluma citrana* sp. nov., but differs in pygofer side without process, end of aedeagus with two adverse spinae-shaped processes, subgenital plate heart-shaped.

Holotype ♂, Libo (25° 42′ N, 107° 88′ E), Guizhou Province, paratypes 2 ♂♂, 2♀♀, Libo, Guizhou Province, 15 Oct. 1988, coll. LI Zi-Zhong.

Etymology. The specific name is derived from the Latin *spinata* (spinae) in reference to the end of aedeagus with two adverse spinae-shaped processes.

Key words Homoptera, Cicadellidae, Penthimiinae, new genus, new species